

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

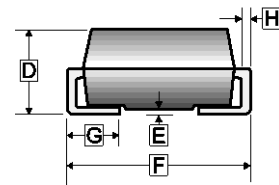
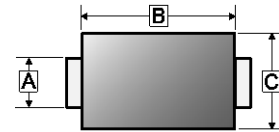
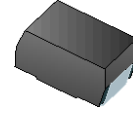
FEATURES

- High Current Capability
- Extremely Low Thermal Resistance
- For Surface Mount Application
- Higher Temp Soldering
- Low Reverse Current

MECHANICAL DATA

- Case: Molded Plastic
- Epoxy: UL 94V-0 Rate Flame Retardant
- Lead: Axial Leads, Solderable per MIL-STD-202 method 208 Guaranteed
- Polarity: Color Band Denotes Cathode End
- Mounting Position: Any

SMC



PACKAGE INFORMATION

| Package | MPQ | Leader Size |
|---------|-----|-------------|
| SMC | 3K | 13 inch |

ORDER INFORMATION

| Part Number | Type |
|-------------|---------------------------------|
| SM8200C-C | Lead (Pb)-free and Halogen-free |

| REF. | Millimeter | | REF. | Millimeter | |
|------|------------|-------|------|------------|-------|
| | Min. | Max. | | Min. | Max. |
| A | 2.750 | 3.270 | E | - | 0.203 |
| B | 6.520 | 7.110 | F | 7.640 | 8.170 |
| C | 5.50 | 6.220 | G | 0.750 | 1.520 |
| D | 1.980 | 2.620 | H | 0.23 | TYP |

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating 25°C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, de-rate current by 20%.)

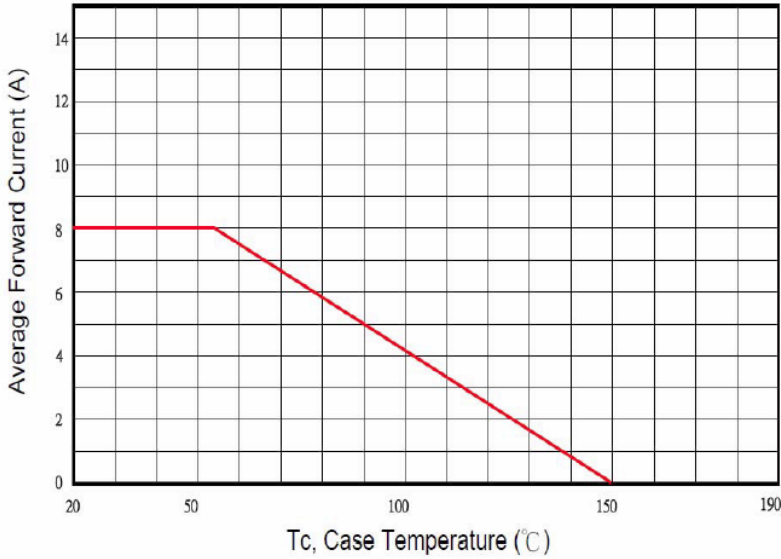
| Parameter | Symbol | Ratings | Unit |
|---|-------------------------|---------|------------------|
| Peak Repetitive Peak Reverse Voltage | V_{RRM} | 200 | V |
| Working Peak Reverse Voltage | V_{RWM} | 200 | V |
| Maximum DC Blocking Voltage | V_{DC} | 200 | V |
| Average Forward Current | $I_{F(AV)}$ | 8 | A |
| Peak Forward Current @8.3ms Half Sine | I_{FSM} | 125 | A |
| Maximum Instantaneous Forward Voltage @8A | V_F | 0.91 | V |
| Maximum DC Reverse Current @Rated DC Blocking Voltage ² | $T_J=25^\circ\text{C}$ | 0.05 | mA |
| | $T_J=125^\circ\text{C}$ | 20 | |
| Typical Junction Capacitance ¹ | C_J | 200 | pF |
| Voltage Rate of Change (Rated VR) | dv/dt | 10000 | V/ μs |
| Thermal Resistance Junction-Case | $R_{\theta JC}$ | 25 | °C/W |
| Thermal Resistance Junction-Lead | $R_{\theta JL}$ | 20 | °C/W |
| Operating Temperature Range | T_J | -50~150 | °C |
| Storage Temperature | T_{STG} | -50~150 | °C |

Notes:

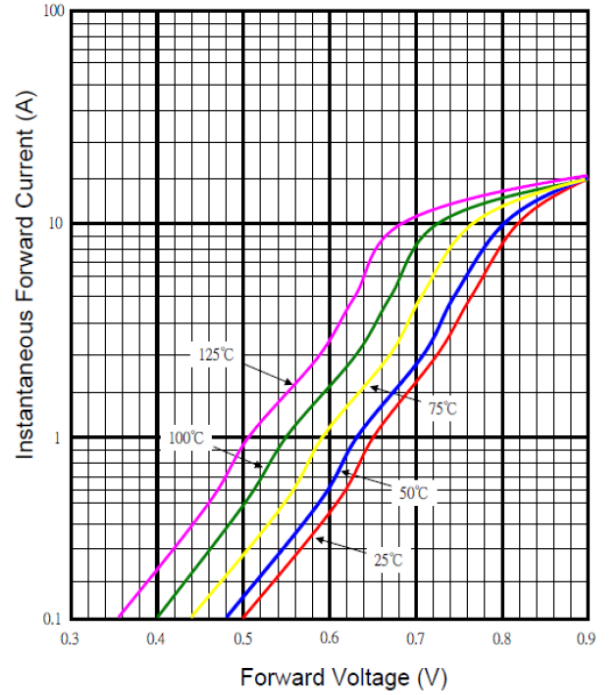
1. Measured at 1MHz and applied reverse voltage of 5V D.C.
2. Pulse test: 300 μs pulse width, 1% duty cycle.

RATINGS AND CHARACTERISTIC CURVES

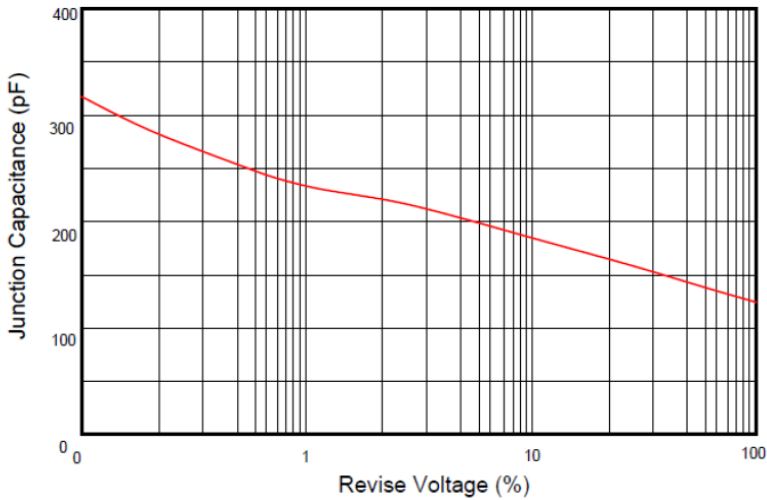
Typical Forward Current Derating Curve



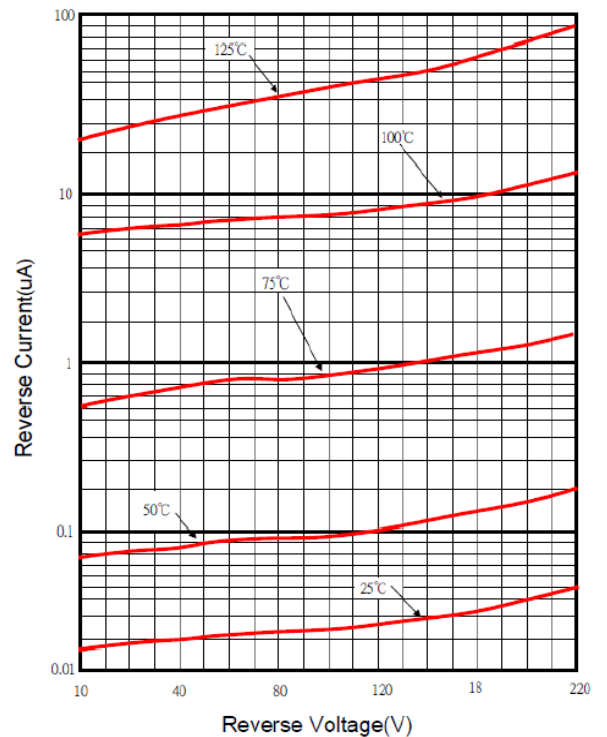
Typical Forward Characteristic



Typical Junction Capacitance



Typical Reverse Characteristic



Maximum Non- Repetitive Forward Surge Current

